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**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Docket No: Q66067

Akira MIYAKE, et al.

Appln. No.: 09/965,830

Group Art Unit: 1647

Confirmation No.: 3999

Examiner: J. Seharaseyon

Filed: October 01, 2001

For: NOVEL POTASSIUM CHANNEL PROTEIN

**SUBMISSION OF DRAWINGS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith please find 6 sheet(s) of drawings in compliance with  
37 C.F.R. §1.84. The Examiner is respectfully requested to acknowledge receipt of these  
drawings.

Respectfully submitted,

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Registration No. 44,765

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WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: October 20, 2003

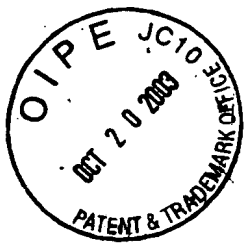
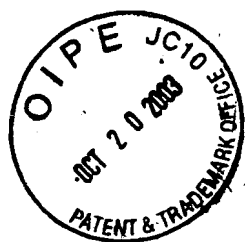


FIG. 1

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1 H P A M R G L L A P Q N T F L O T I A T R F D G T H S N F V L G N A Q V A G L F P V V Y C S D G F C  
1 M P V M K G L L A P Q N T F L O T I A T R F D G T H S N F L L A N A Q G T R G F P I V Y C S D G F C  
51 D L T G F S R A E V M Q R G C A C S F L Y G P D T S E L V R Q Q I R K A L D E H K E F K A E L I L Y  
51 E L T G Y G R T E V M Q K T C S C R F L Y G P E T S E P A L Q R L H K A L E G H Q E H R A E I C F Y  
101 R K S G L P F W C L L D V I F I K N E K G E V A L F L V S H K D I S E T K N R G - G P D R W K E T G  
101 R K D G S A F W C L L D M H P I K N E M G E V V L F L F S F K D I T Q S G S P G L G P Q G G R G D S  
150 G G R R R Y G R - A R S K G F N A N R R R S R A V L Y H L S G H L Q K Q P K G K H K L N K G V F G E  
151 N H E N S L G R R G A T W K F R S A R R R S R T V L H R L T G H F G R R G Q G H K A N N N V F E P  
199 K P N L P E Y K V A A I R K S P F I L L H C G A L R A T W D G F I L L A T L Y V A V T V P Y S V C V  
201 K P S V P E Y K V A S V G G S R C L L L H Y S V S K A I W D G L I L L A T F Y V A V T V P Y N V C F  
249 S T A R E P S A A R G P P S V C D L A V E V L F I L D I V L N F R T T F V S K S G Q V V F A P K S I  
251 S G D D D T P I T S R H T L V S D I A V E M L F I L D I I L N F R T T Y V S Q S G Q V I S A P R S I  
299 C L H Y V T T W F L L D V I A A L P F D L L H A F K V N V Y F G A H L L K T V R L L R L L R L L P R  
301 G L H Y L A T W F F I D L I A A L P F D L L Y I F N I T V T S L V H L L K T V R L L R L L R L L Q K  
349 L D R Y S Q Y S A V V L T L L M A V F A L L A H W V A C V W F Y I G Q R E I E S S E S E L P E I G W  
351 L E R Y S Q C S A V V L T L L M S V F A L L A H W M A C I W Y V I G R R E M E A N D P L W D I G W  
399 L Q E L A R R L E T P Y Y L V G R R P A G G N S S G Q S D N C S S S S E A N G T G L E L L G G P S L  
401 L H E L G K R L E V P Y - - - - - V N G S - - - - - V G G P S R  
449 R S A Y I T S L Y F A L S S L T S V G F G N V S A N T D T E K I F S I C T H L I G A L H H A V V F G  
423 R S A Y I A A L Y F T L S S L T S V G F G N V C A N T D A E K I F S I C T H L I G A L H H A V V F G  
499 N V T A I I Q R M Y A R R F L Y H S R T R D L R D Y I R I H R I F K P L K Q R M L E Y F Q A T W A V  
473 N V T A I I Q R M Y S R R S L Y H S R M K D L K D F I R V H R L P R P L K Q R M L E Y F Q T T W A V  
549 N N G I D T T E L L Q S L P D E L R A D I A M H L H K E V L Q L P L F E A A S R G C L R A L S L A L  
523 N S G I D A N E L L R D F P D E L R A D I A M H L N R E I L Q L P L F G A A S R G C L R A L S L H I  
599 R P A F C T P G E Y L I H Q G D A L Q A L Y F V C S G S H E V L K G G T V L A I L G K G D L I G C E  
573 K T S F C A P G E Y L L R R G D A L Q A H Y Y V C S G S L E V L R D N H V L A I L G K G D L I G A D  
649 L P R R E Q - - - - - V V K A N A D V K G L T Y C V L Q C L Q L A G L H D S L A L Y P E F  
623 I P E P G Q E P G L G A D P N F V L K T S A D V K A L T Y C G L Q Q L S S R G L A E V L R L Y P E Y  
689 A P R F S R G L R G E L S Y N L G A G G G S A E V D - - - T S S L S G D N T L - M S T L E E R E -  
673 G A A F R A G L P R D L T F N L R Q G S D T S G L S R F S R S P R L S Q P R S E S L G S S S D K T L  
733 - T D G E Q G P T V S P A P A D E P S S P L L S P G C T S S S S A A K L - - - - - L S P R R T -  
723 P S I T E A E S G A E P G G G P R P R R P L L L P N L S P A R P R G S L V S L L G E E L P P F S A L  
774 A P R P R L G G R G R P G R A G A L K A E A G P S A P P R A L E G - - - - - L R L P P M P W N V P P  
773 V S S P S L S P S L S P A L A G Q - G H S A S P H G P P R C S A A W K P P Q L L I P P L G T F G P P  
819 D L S P R V V D G I E D - G C G S D Q P K F S F R V G Q S G P E C S S S P S P G P E S G L L T V P H  
822 D L S P R I V D G I E D S G S T A E A P S F R F S - - - R R P E L P R P R S Q A P P T G T R P S P E  
868 G P S E A R N T - D T L D K L R Q A V T E L S E Q V L Q H R E G L Q S L R Q A V Q L V L A P H R E G  
869 L A S E A E E V K E K V C R L N Q E I S R L N Q E V S Q L S R E L R H I M G L L Q A R L G P P G H P  
917 P C P R A S G E G F C P A S T S G L L Q P L C V D T G A S S Y C L Q P P A G S V L S G T W P H P R -  
919 A G S A W T P D P P C P Q - - - - - L R P P C L S P - - - - - C A S R P P P S L Q D T T L A E V H C  
966 P G P P P L M A P W P W G P P A S Q S S P W P R A T A F W T S T S D S E P P A S G D L C S E P S T P  
959 P A S V G T H E T - - - - - G T A L L D L R P S I L P P Y P S E - - - - - P D P  
1016 A S P P P S E E G A R T G P A E P V S Q A E A T S T G E P P P G S G G L A L P W D P H S L E H V L I  
989 L G P S P V P E A S - - - - - P P T P S L L R H S F Q S R S - - - - -  
1066 G C H G S G T V Q W T Q E E G T G V .  
1014 - - - - - D T F H .



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FIG. 2A

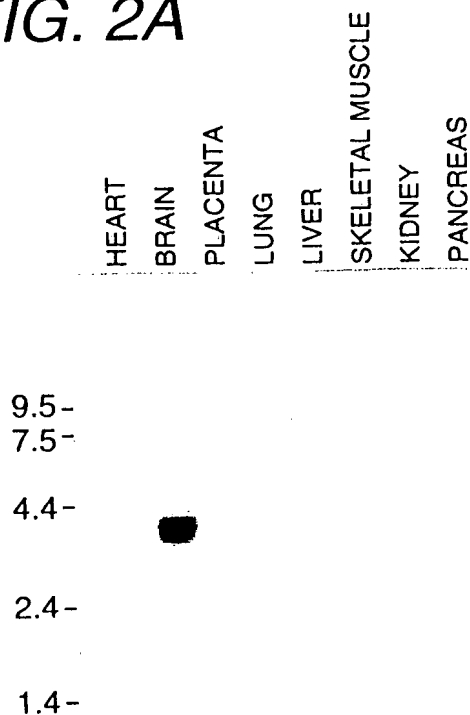


FIG. 2B

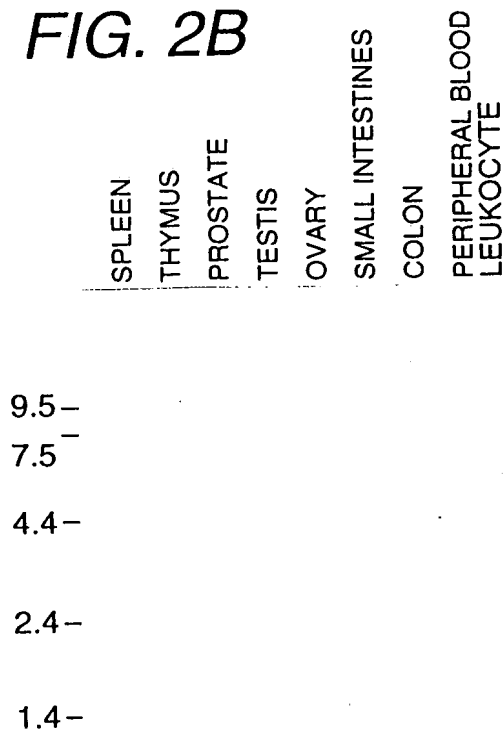


FIG. 2C

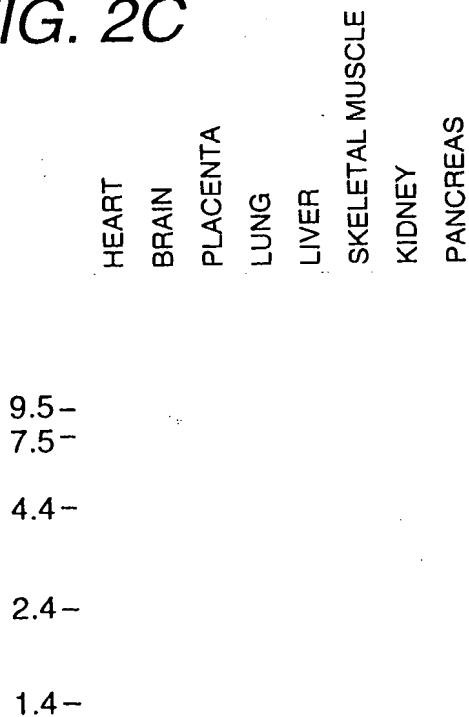
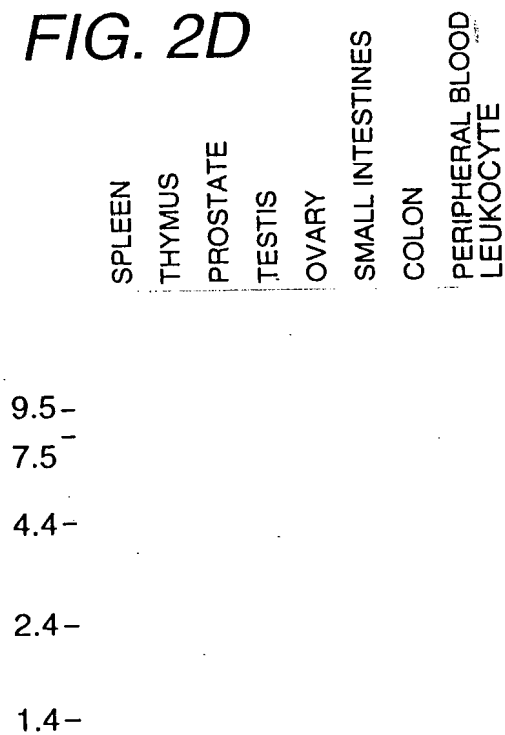


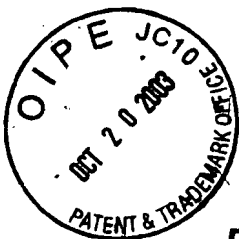
FIG. 2D



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FIG. 3A

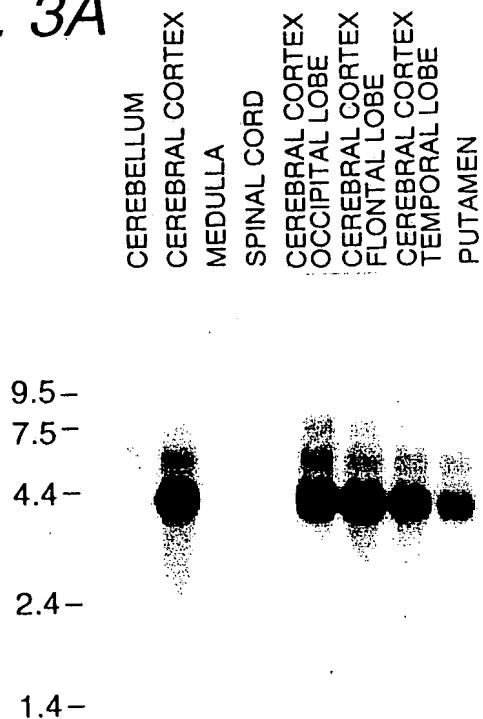


FIG. 3B

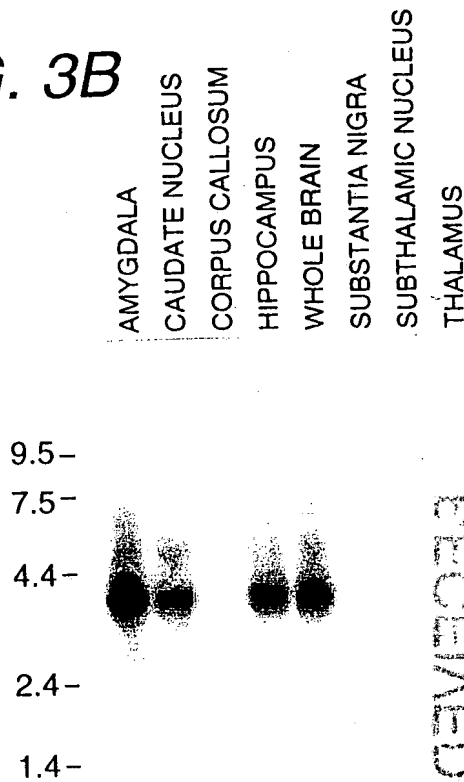


FIG. 3C

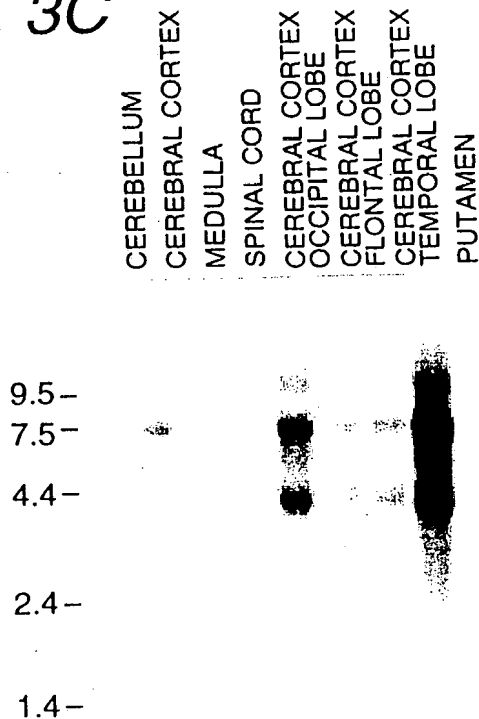
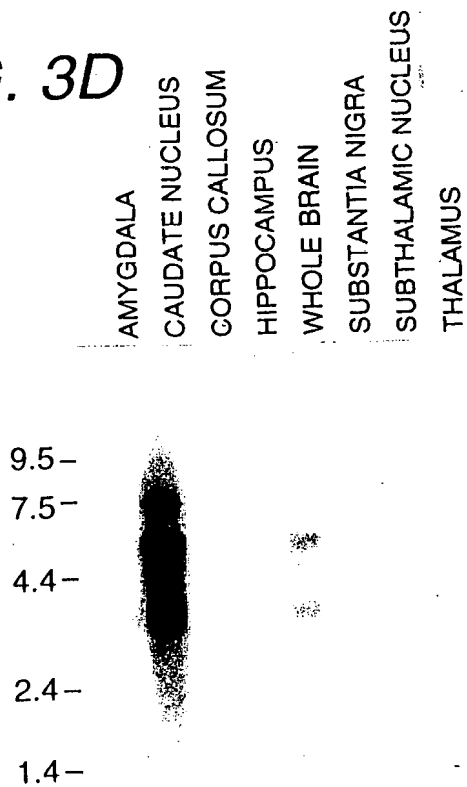


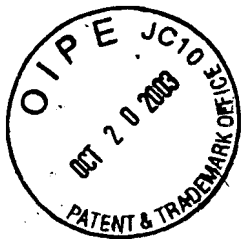
FIG. 3D



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FIG. 4A

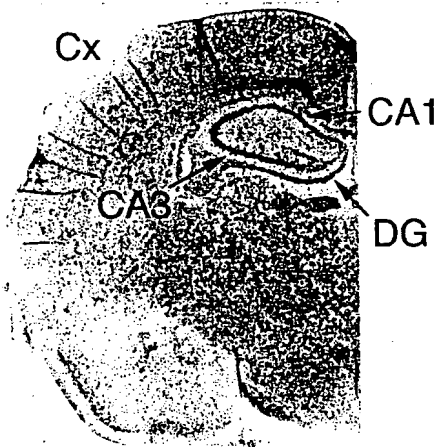


FIG. 4B



FIG. 4C

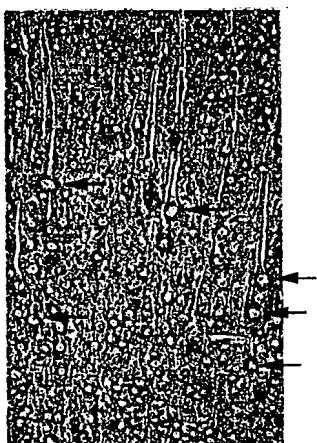
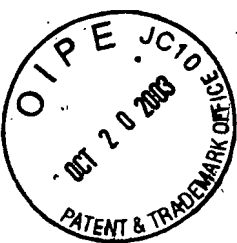


FIG. 4D





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FIG. 5

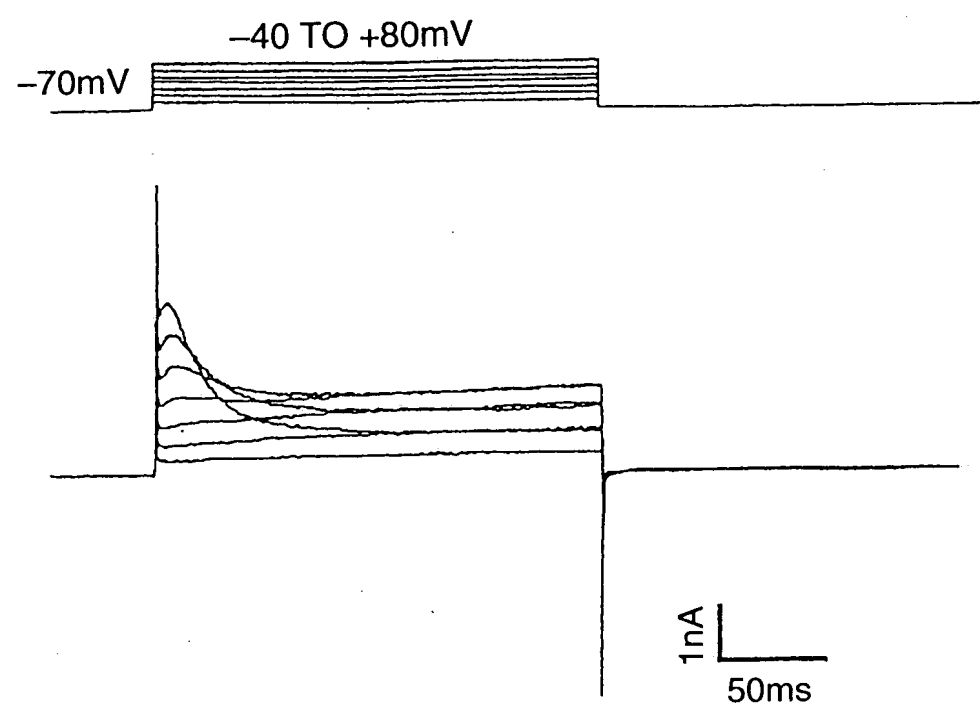
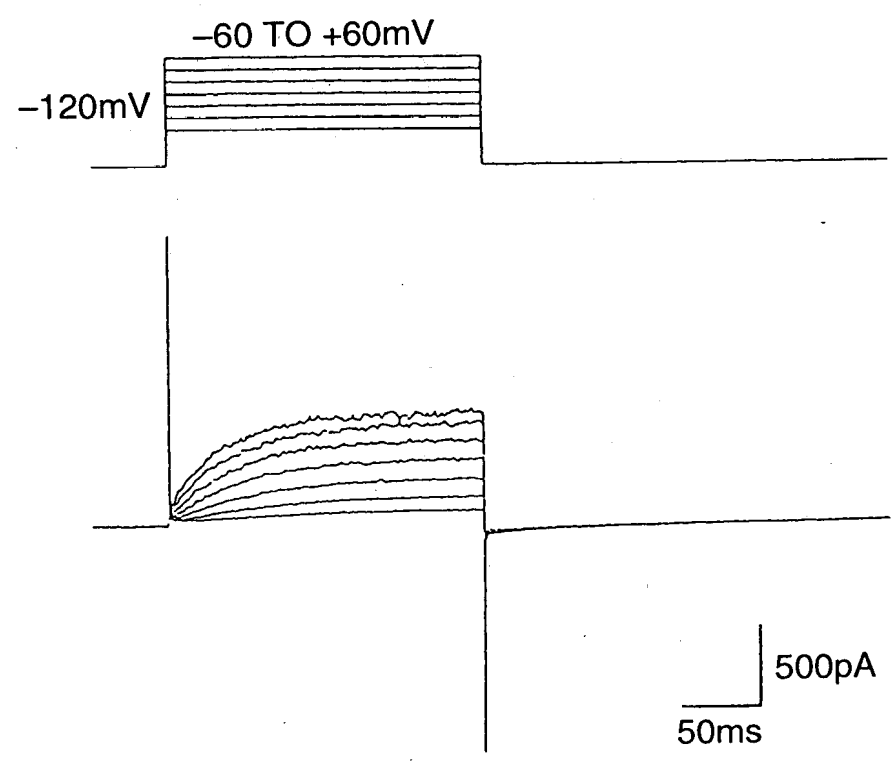


FIG. 6



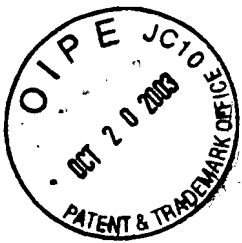
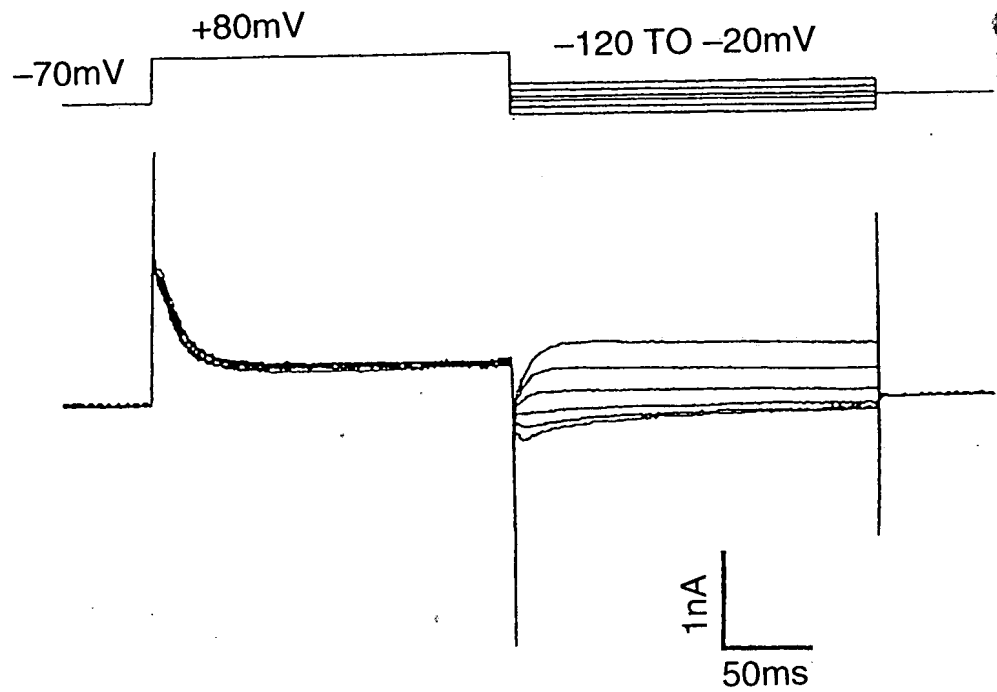


FIG. 7



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FIG. 8

